## THE BOERS AS FIGHTERS. GOOD MARKSMEN STILL TO BE FOUND

IN THE TRANSVAAL. Eruger's Fortifications—Plans to Destroy the Gold and Diamond Mines—Boer Tac-tics Against the English—Fighting Qualiof the Men and Women, Too The Transvaal Boer is always ready to fight

He carries his rifle on his shoulder and a piece of bittong in his pocket, mouching around over the veldt so that if a field cornet gallops up to tell him that war has been declared he may start for

the front at once.

spect of an occasion to use his rifle has eve sent a gleam into the ordinarily dull eye of the and made of him a changed man. Whether the object be a human being or a wild duck may along a gleaming barrel and hit small objects at When he shoots at a British soldier, long range. a he first examines him carefully to see he is an officer, and then picks out some partic siar button or conspicuous part of the uniform o which to rest his sight. He does this partly from force of habit, just as he aims at the white breast of a duck, though it is an unwritten order in Bos ratfare to kill the officers or chiefs, if possible When the captain or commandant sees an offi eer it is his plan to select about six of the best marksmen available to fire simultaneously at him. The higher his rank the better. The man as sarefully selected may be regarded as doomed To an American these methods may seem cold-blooded and cruel, but it must be remembered that the Transvaal burghers hate the English a they do the dreaded black spiders that infest the country and always refer to the British soldier as ruinels or red-necks. There are two explana ns of this name. One is that when the English came to the Cape an old Dutchman notice that when John Bull got angry he grew red about eck. In the Transvaal they say the name arose when British dragoons were quartered from the red coat collars which made the For the English the Boers have framed this

particular defiance: "If you will have our coun take it; but it shall be over our bodies and the ash heaps of our property and goods." Paul Kruger himself is the author of the catch phrase which was embodied in the celebrated third prop lamation made in 1881, when the British were bectoring the old farmers. It was no idle threat or dramatic bluff. Any one who has seen these long-legged, weather-besten plainsmen get to gether at a rally has realized immediately that they would never give up their country until all were wiped out-men, wemen and children.

The Commandant-General of the Boer forces i Piet Joubert, a man 68 years old, with a string of military victories extending over one-half a cen tury. In the history of the Transvaal he has borne almost as important a part as Paul Kruger, Until this present agitation there existed a strong rivalry between the two. For three successive times Kruger was elected President by a small majority over Joubert, and since boyhood they have con tested neck and neck for various honors. When it comes to fighting the English, however, they are united. Joubert has long been the military head of the nation, and is recognized to be the best fighter and tactician in the country. He has divided the Transvaal into seventeen districts for mobilization se, each district being under a commandant These districts are, in turn, subdivided under the nds of field cornets. While Joubert is the Commander-in-Chief, he still is subject to the order of the Volksraad and President Kruger and makes no important moves without their consent.

In spite of the Boers being scattered all over th Transvaal, the whole nation can be mobilized in two or three days, a proceeding which probably cannot be duplicated by any other country. This is possible owing to the Boers' constant equipment in light marching order. The moment that Kruger decides to declare war Joubert either telegraphs or sends relays of messengers to each commandant This officer promptly notifies the several field cor-note in his district and the latter either despatch their assistants, who gallop here and there on the veldt sounding the alarm, or else make bon fires at night and pillars of smoke by day, the pre arranged signals for war.
From a dull, apathetic, ill-kept and lazy dreamer

the Boer is then transformed into a quick-witted, cunning and energetic being. The Transvaal burgher, indeed, is a most peculiar combination o phlegmatic Dutchman and a wildly excited Latin On the veldt he will loaf around in the sun and only move to reload his pipe. In the Raad chambers the sergeant-at-arms oftentimes is unable to maintain order. The members leap around, throwing arms, shout and carry on like anarchists.

It is on the rifles of these old country Boers that Kruger mostly depends. On the night that news 1895, there was consternation at Pretoria. The first despatch said that 3,000 British troops had crossed the border, and then a second, sent by the British as a decoy, stated that the troops were only the Chartered Company's police making a short Joubert wanted to take the few cannon that were in Pretoria and go out to meet the invadera. "Oh, no. Piet," said Oom Paul, "Don't you suppose 200 of our old farmers with their rifles can

The result proved that Kruger was right. The whole force that fought Jameson consisted of 400 men in two divisions, summoned from the open veldt. Jameson began the attack with artillery.

The old Boers laughed at this.

Every man take to a rock," ordered Commandant Cronje, and the farmers dodged behind rocks and trees.

At the proper moment they advanced in proper Indian skirmish in two divisions, opening a dead fire at 500 yards. The reformers then cut loose with Maxims, but for once the machin guns which had been used to mow down the African natives were of no avail. The Boers were so scattered that they evaded the bullets. Jame son finally opened with a twelve-nounder, bu Cronje told off twenty Boers to kill the gunners, which they did with precision and accuracy That practically ended the fight.

strength of the Boers as a military natio lies in the fact that nearly every mas possessed innate wariness and is himself a general. This man Cronje, who captured the raiders, was not a celebrated warrior, yet he took hold of the campaign on a moment's notice, mapped out his plans quickly led on Jameson until he had him surround ed and then went at him.

Until the last four years, Kruger had taken no precautions against a slege, relying entirely on open warfare. After the Jameson raid. however, he began to follow the example of more ed nations. The first step was to erect forts at Johannesburg and Pretoria. The for mer now reposes under the brow of strong forti fications. There are six forts altogether and they command a broad expanse of country. In se he has placed long range rifle guns of French and German patterns and quick-firing guns. has filled four warehouses with arms and made secret preparations, which include long tunnels underneath the gold fields, so that the town of Johannesburg can be destroyed by one train of powder, for the motto of the Boers is "Rather a ruined country than no country."

Pretoria is guarded by four forts, one at each of the four corners of the town. Heavy guns of the Krupp make are installed here under the direction of German, Dutch and Frunch officers Men have been drilled to train these guns effectively and the town is supplied with provision o withstand a long siege. The latter method has been the favorite one spoken of by the Eng-lish to conquer the Boers. The Transvaal is such a poor country that wild animals cannot exist in some parts of ft, and the British experts have always said that to starve the burghers would be the easiest way of subduing them Kruger has provided against this in some measure by building a great granary, where meats and ed food are stored in large quantities. He has little fear of such a pass, however, and recently said that the English might walld a wall around them high as Jericho, and then he and his people could live comfortably for twenty years. The Boers do not worry much about being starved out, for a Boer can do more work on less food than any other human being if he wants to. He is accustomed to living the veldt for weeks with no nourishment but a long strip of dried meat, called bittons, coffee and mealins. What he most dreads is to be de-puted of coffee, which fluid the Boar drinks black,

so hot, that as he says, if he spits it on his

dog it will take the hair off. Mealles to a species of corn, very nourishing, which is related in large quantities in South Africa. It is cooked like oatmeal, until the kernels are soft and then eaten with salt or milk and sugar.

On a campaign the Bosts observe very strict rules. If a man fires after the order is given to ease the commandant fines him. Every night the lights are put out early and the men turn in be ind the laager. This is a circular imprompts fortification made by lashing all the wagons to gether and affords a good protection against bul-lets. Their method when attacked is to send out a line at double quick, drop to the knees, take steady aim and fire, rushing back to the laager, then, to give way to a second party. They have always been successful in native warfare this way, but against trained English soldiers with machine runs they would have small chance. A long campaign is no hardship to the Boer.

When the alarm comes the women of the house and nearly every Boer has a family of ten, twelve or eighteen, of whom two-thirds are girls, get him half a dozen pieces of bittens and a supply of coffee and tobacco, while the boys saddle and equip the best horse in the stable. Of course every ad who can stand a march also goes to the front, for the Boer children are taught to use a rifle at an early age, and it is a common sight to meet on the pen veldt two or three strapping girls swinging dong with a rifle on the look-out for hartbee or turkey buzzarda. In fact the women count on doing their share of the fighting. Since the Boers left Cape Colony in 1836 the feminine portion have been acustomed to loading a rifle behind the laager and if necessary firing it at a black face In case of war with the English they are supposed look after the flocks and herds and defend the homestead, and every Boer hut in the Transvaal in wartime is a fortified block house de fended by a company of girls and boys with the nother of the home in command.

What they most fear is an uprising of the na tives, the very thought of which gives every white person in South Africa a chill of horror. Kruger counts on being able to muster at the very mos 65,000 men in the Transvaal and Orange Free State, but around him are 367,000 natives, little setter than savages, who are only waiting for an opportunity to massacre white men, not being articular whether they are Boers or English The English town of Durban, Natal, contains 0,000 white persons. Just north of them are 500 000 Zulus, who are the bravest black fighters n South Africa. No one knows what attitude the blacks would take in case of an English-Boer war, but both Queen Victoria and Oom Paul dread an uprising in this quarter.

As a fighter the Boer is a mixture of strategy

on. Before going into battle each cap tain leads his troops in prayer, for the Boer children are brought up on the Heldelberg catechism, and the first thing they learn is the answer to the "What is the only comfort in life and in death?" The army then joins in singing Old Hundred, "every man," as one Englishman de scribed it, "trying to outdo the other in slowness of time, each note being prolonged for at least six beats." The religious injunctions are not forgotten on the march and travel on the Sabbath day is avoided as much as possible. Oom Paul's pre-eminence in the nation is due to his plety as much as anything else, and when he was ommandant general and military leader he could get a following by raising his hand. The Boers are almost as great fanatics in war as the Mohammedans, though their natural strategy prevents them from recklessly destroying themselves. Kruger rose to fame by taking hold of a campaign against the natives in which his predecessor had This man did not belong to the Dopper Church, which is the ultra-orthodox branch of the Dutch Reformed that is in the secendant there. The Boers said the Lord was against the other eader on account of his heresy.

A Boer military camp, however, is not entirely devoid of recreation. Shooting at a mark is always in order and the young men indulge in a rough sport that sometimes proves serious. They all it throwing the ox-hide, and it consists in tossing a man up in the air just as the American oldiers do with a blanket. About a dozen chape grab the edges of an ox-hide and from this throv a comrade in the air so high that when he strikes again he is unconscious and perhaps has broken

There is no doubt about the skill of a Boar with the rifle, though the English contend that the new generation has deteriorated vastly in this respect. This may be true of those young men who are growing up in the towns, but of those who live on the open yeldt this cannot be said. It is common o see them while riding at a good pace drop bird on the wing at 100 yards. In killing an or for meat on the march more than one bullet is never used.

Tommy Atkins dreads the Boer. There is a cold, unfeeling crack to his rifle that makes the English soldier pale, for he knows the bullet is coming straight for the centre of his belt. Fight ing against the Matabele or Bechuana is not such dangerous matter. The machine guns do most of the work and the only reply is a scattered volley of assegals and slugs. Kruger and Jouber know this and count on this shrinking dread to keep the English troops at a distance. Heretofore this has been done.

Five battles has Joubert had with British The number of troops engaged on each side at these various engagements have varied between 250 and 1,500. At Laing's Nek the English lost 190, the Boers 24; at Ingogo the British loss was 142, the Boer 18; at Majuba Hill the British loss was 280, the Boer 5: at Bronk orst Spruit, the British lost 120, the Boers 1 and in the Jameson raid 100 Reformers fell while English troops have suffered in their fights with he Boers to the extent of 832 men, the Transvaal farmers' loss has been but 52 and at this rati they believe they can at least maintain a long war with the English.

A war with the Boers will prove a costly pro eeding to England, for Kruger's first move will be to rush over the border to Kimberley and wreck diamond mines that have produced \$400,000,000 worth of diamonds in twenty-five years. There is militia regiment at Kimberley, but it is not strong or well armed and could not withstand, ar attack by the Boers. The Johannesburg mines he could destroy at his leisure. They produc \$125,000,000 worth of gold every year and are wned most entirely by Englishmen.

Laing's Nek is a pass in the Drakensberg mount tains and it is the key to Natal. It is Kruger plan to secure this, and from there harry the colony of Natal. It would be easy for him to destroy the railroad communications, as the Nels is pierced by a tunnel 2,113 feet long and the Natal railroad worms its way around mountain peaks at a great height and one sortic would suffice to destroy its usefulness.

The Boers have been experimenting in the last two years with devices to utilize the railroads in the Transvaal in event of war, and to this end have employed skillful engineers to constru fortified cars consisting simply of a steel bed with an oval covering of wrought steel. This hood is large enough to contain a company of sharpshooters, who fire from portholes, and a large quantity of ammunition. It is intended o operate these on the various lines running out from Johannesburg. Krager has been progres sive in recent years with regard to railroads, and the systems in the Transvaal compare favorably with those of Cape Colony. One line connects at Volksrust with the Natal line; another runs south through South Orange Free State connect ing with the Cape Colony road; a third runs north ward to Petersburg; a fourth goes directly eastward to Delagoa Bay in Portuguese territory. while a short line has just been completed which makes connections with Cecil Rhodes's Cape to Cairo system, westward from Johannesburg The country is thus fairly well covered with rail road lines and if the iron cars prove serviceab they could be operated in all directions.

## True to Her Sweetheart's Memory.

From the Indianapolis Journal. Muncis, Ind., Sept. 20,-Miss Mary Baird committed suicide with carbolic acid at Albany on Tuesday night. She was 62 years old and has resided with her brother. Dr. Baird, for several years. It is claimed that the woman was betrothed to a young man who enlisted in the Civil War, promising him never to marry another if he should be killed. He died on the battlefield and she kept her word. Lately she has become despondent. She was not found until her screams attracted the family and it was then too late.

DRIVEN OUT BY SMUGGLERS. Customs Collector of St. Pierre Accused Being a Canadian Spy

colony of St. Pierre, Miquelon, off the coast of Newfoundland, has a Dreyfus case of its own. Advices received from that place give details of the riotous proceedings there, some days ago, briefly reported at the time by telegraph, in which an attempt was made to lynch the resident Collector of Customs, who was accused of being a spy in the employ of the Canadian Government For many years past St. Pierre has been the cen tre of extensive smuggling operations into Canada. Rum from the West Indies, corn whiskey from the Western States, and French wines and dies are exported illicitly to points in the lower St Lawrence and in the Maritime Province of Canada in enormous quantities. The large ressels which leave the islands with these car goes are met in the gulf by smaller smuggling craft, to which they distribute the contraband goods. These smaller schooners contrive to land their cargoes on Canadian soil despite the vigilance of the Dominion officials and of the revenue cutters employed by them. At long intervals one of these smugglers is captured and confiscated tegether with her cargo, but the profit of this illicit commerce is so large, owing t enormous duty upon spirituous liquors, that those in the trade could well afford to haveone ves sel out of three seized and forfeited to the Crown The Government has found itself seriously has dicapped in this matter by the persistent refusa of the French Government to permit the British authorities to be represented by a resident Consul at St. Pierre. No reason is given for this refusal except that the treaty ceding the island to France does not provide for what the British ask, and none can be imagined except a desire to protect the industry in which the French smugglers are engaged. In the absence of a resident British or Canadian agent, who might keep the Ottawa inthorities posted in regard to all cargoes leaving the laland, the Dominion Government has been compelled to look to others for the information. That somebody has been keeping them pretty well posted is evident from the successful manner in which the usual smuggling in the St. Lawrence has been kept down during the present The suspicions of the islanders that J Ferry, Collector of Customs in the employ of the h Government, was the traitor, were height ened by the fact that he received \$1,500 in gold quite recently and deposited it in a local bank. On being requested by the authorities to account for the money, he explained that it was a remit tance from a member of his family. Inquiry did not, in the opinion of the authorities, bear out Ferry's statements, and he was finally charged with being a spy in the employ of the Canadian

The recent visit to St. Plerre of the chief Cans lian customs preventive officer aggravated the difficulty, and finally on the day that the news I the re-conviction of Dreyfus reached the islan the anger of the people was aroused and a mob started out to lynch the accused. Ferry was compelled to fice for his life. After he had escaped by steamship to Sydney he was twice hanged effigy and the most insulting epithets wer placarded about the place, comparing Ferry to Dreyfus, and containing such inscriptions as "s bas les traitres," "conspuez Ferry," 'Dreyfus Ferry' &c. Ferry has gone to Montreal to endeavor have M. Kleckowski, the Consul-General, afford tection in the execution of the duties of his office. Unless he can disabuse the minds of him, it is believed that it will be quite impossible for him to attempt to live upon the island again. Hitherto he has moved in the best society of the place. So far the Canadian Government has not uttered a word in Mr. Ferry's favor

CORRECTING THE MAPS.

# The Duke of the Abruzzi Has Found Another

When Mr. Jackson went to Franz Josef Land. made of the archipelago quite to pieces, for he ound it extremely inaccurate. The map Jackson made would hardly be recognized as a chart of the ame region that Payer had tried to delineate. The old story of explorer after explorer correcting one another's blunders is again illustrated, if it is true that the Duke of the Abruzzi has now found

an important mistake in the map Jackson made. This Italian prince, who is in quest of the North Pole by way of Franz Josef Land, reached the slands last summer, and, according to a letter received from his party, he has established the fact that Cape Flora is really ten geographical miles east of the position assigned to it on Jackson's map. Cape Flora was Jackson's headquarters for three years, and there is an element of humor in the circumstance if, while he was exposing the many shortcomings of explorer Payer, he was blundering himself and even assigning the wrong position to his own camp.

The scientific observations of the Italian ex dorer should have a high degree of merit, for he has very competent assistants, and his equipment of instruments as well as other supplies is un doubtedly the best that was ever taken into the Arctic regions. The total expenses of the expedition are expected to reach \$500,000, of which the King of Italy has contributed a fourth. Some de tails of the Duke's equipment are quite unique He distributed his baggage among 1,500 boxes each weighing about fifty-five pounds, and casily portable, if necessary, upon a man's back. He divided the boxes into four classes: provisions. clothing and equipment; tools and scientific instruments, and, lastly, articles that are useful, but not indispensable. Each class has its special color, and each box is numbered according to th class and nature of its contents. The provisions. consisting of rice, sea biscuit, preserved meats etc., have been so divided that each box contains five different kinds of food, in order that the fare may in no case be reduced to one article of food The inside of each chest is lined with tin, and soldered to keep out water and dampness. The boxes containing the clothing are of bright green, those holding the scientific instruments are red, and yellow boxes hold the useful, but not indisensable articles, which include games and musical fustruments

## Peculiarities of the Japanese Bath.

From the Baltimore Sun.

From the Baltimere Sun.

To their credit, be it said. Jans are regular whales at bathing, and usually when not drinking tea are bathing. Their only trouble in life seems to be their inability to enjoy both these delights at the same time. If some American trick swimmer could teach the Japs how to swallow tea out of a bottle while under water, they would build a tin temple round him, burn incense made of old rags and bones under his nose and worship him.

Public baths are numerous in which "mixed bathing" was practised until lately; but now a bamboo fence separates the sexes, though it does not acreen them from view, the fence being only two feet high in bathhouses in the interior of Japan. Some homes have a woeden bathtub, circular shape, with a stove built in one end, which heats the water. The whole family, beginning with the father, bathe in the same water. Sometimes women "tub" themselves and their children outside their doors in the atreets where sidewalks should be. The first time a foreigner falls over one of these bathing parties and into the arms of the bather he feels that the situation is unique, but by the time he has sumbled over half a dozen he tires he feels that the situation is unique, but by the time he has tumbled over half a dozen he tire of the fun. rubs his shins and makes some very incomplimentary comments, while the polite little woman underneath squeaks out, "Sayon-ara." (Sir, please call again), &c.

#### A Lost Bryan Club. From the Memphis Seimitar.

A lot of people would like to know what has become of the Bryan Club of Memphis. This association was established something like a year or so ago. It was composed of the very tream of the Bryan supporters in this city, including many of the best known citizens in business, professions and leisure. The membership was very exclusive. It was something like that of the Masonic order is including many of the best known citizens in business, professions and leisure. The membership was very exclusive. It was something like that of the Masonic order is popularly supposed to be, open to the invited, but closed to the uninvited. The club was understood to have purchased an old and historic residence building just out from the moli and turmoil of the business centre, and there, in the privacy of that retreat, congenial spirits were to gather, and over the social board they were in a conversational and sitogether informal way to discuss the policies of parties and determine the fats of nations.

But nothing has been heard of the Bryan Club of late. It would seem that, with the trust octopus abroad, the spirit of militariem uneasy, the corpse of free sliver a-bleeding, now is the time for the Bryan Club to raise its voice and announce that there is a rock of refuge standing high above the turbuent waves of popular unrest to which the drowning populace may swim for safety.

## LOVE AFFAIRS OF WHALES. BIG FISH BECOME VICTIMS OF THEIR

QUEBEC, Sept 22.-The little French crown MISPLACED PASSION. Mistake Ships Sometimes for Other Whale and Do a Lot of Courting Before Ther er Their Error or Are Discourag -Sad Fate of Some Persistent Wesers-Interesting Home Life of Whales AVALON, Cal. Sept. 18. - T suppose now. you

ave never seen a whale in love," said the captain of the glass-bottomed boat. The remark was occasioned by a splendid panorama formed by the passing of three whales across Avalon Bay. The monsters rose and fell in graceful undulation, while one, as though to prove that it was a real whale and no mistake cose into the air, its enormous flukes shining far above the water, then disappearing after the huge

oody that sank into the sea. "I cannot say that I have ever seen a whale love," replied a voyager in the boat through the glass window in which he looked into gulfs enchanted; "but how does a whale in love act?

"Why," explained the mariner, "do you kno there is something about this place that leads up to romance and love making? Read this," and h dropped his oars and took from his pockets a lette which he unfolded and handed to the pass "Dear sir," it read, "I wish to thank you for being the means of my securing a wife. You will member the day a young lady dived beneath the boat and looked up through the glass? I was looking down at her. Well, she is my wife now and if you ever visit Marshalltown, la., we shall both be happy to see the skipper of the glass

"There you are," added the captain, "romand eneath the waves; regular mermaid business." "But how about whales?" urged the passeng who evidently thought he was being switched of

"Well," replied the captain, hauling violently o

the port oar to get the glass window over a beauti ful mass of green seaweed which he called the Grand Canon, "whales do fall in love and I can prove it. They get so foolish they even fall in love rith ships, and that's where I first got on to it. You see, I wasn't always the skipper of a glass octtomed boat. Last year I ran a yacht of forty tons, and one day brought a party over here; but the wind died out and we lay about eight miles off shore for two days. On the second day a large California gray whale came alongside and came mighty near scaring everybody to death. I've seen lots of whales alongside, but I never saw so affectionate an old cuss as this. He first made a circle right around us, then came up underneath like a leaf; then he deliberately came up alongside. turned partly on his side, so that one-half the big fluke was out of water, and lay there. Why, I could have stepped off on to his back a dozen times, only I thought I wouldn't. He was as sociable as you please and just lay there closer than a brother. a durn sight closer, I can tell you. He kept this up until most of the passengers had their hair all ready to turn white. Then he began to move up and down, rubbing himself against the side of the assing right along, then turning and coming back, perhaps on the other side. I thought of putting a bullet into him, but didn't believe it was safe, as of all the whales, this species is the most vicious; and there he staid until the wind picked up fresh, and even then be followed us right alongside.

"How do I account for it? Why, it was a case of love at first sight. The whale thought we were whale and fell in love with us and was regularly courting the yacht, patting her with his paddle and fluke and sidling up to her in various ways There wasn't any doubt about it to my mind, and I've seen the same thing a dozen times. There's hardly a week but what the steamers here rur across a whale either coming or going, and the whales sometimes come alongside and swim within a few feet of the vessel, evidently trying to pick up a fliration with her; and there's no little reason for a whale to be fooled, as the hull of a vessel looks very much like a whale. The buil whales act very much like other animals. They at first move around showing themselves off, going through their best paces; gradually they come nearer, and only last week a whale swam alongside the steamer Hermosa for half an hour, so near that they could have hit him with a stick. Then they begin to get more affectionate and rub against the sides, in their whale fashion, apparently trying to attract the attention of the supposed capricious and indifferent whale which is really a thing of oak, swathed in copper, with a heart of throbbing steel and blood of steam; and it is at this time that the whales sometimes come to grief. Finding that they cannot attract the attention of the supposed whale by ordinary means, and that she ferent, they try to stop her by swimming in front or crossing the bows, but instead of feeling the yielding head of a whale, the sharp cutwater of the steamer strikes the wooer and runs him down, perhaps almost cutting him in two.

"You may be sure that the skippers of the steamers don't do this on purpose, as it is liable to smash the vessel; cases have been known where a whale struck sank a ship. All summer there are two boats, sometimes three, crossing the Santa Catalina Channel, a thirty-mile stretch, which is one of the greatest whale highways in the world. and more than once the skippers have slowed down or stopped when a big whale got ahead and played his antics before the steamer. The Hermosa is an ocean steamer, and on a trip to San Francisco a year or so ago she ran down a big whale near Portuguese Bend, cutting her open. The Santa Rosa, that runs from San Francisco down to San Diego, ran one down last month. One of the passengers told me about it. He said it brought verybody up standing. They had seen a whalnot far off and it gradually came nearer and seemed take the steamer for a whale, playing alongside She is a big steamer and a fast sailer, and all at once the whale, which must have been seventy feet long, made a play directly in her course. There was a trembling motion, a kind of rise of the bow and a sudden stop, and it was all over. The cutwater had cut the big animal open like a knife, and the steamer moved on through s sea of blood. This whale was evidently killed at once, and it drifted ashore on Santa Rosa Isl and a week or two later. Sometimes it is impossi ble to get rid of these whale lovers, and sailors adopt all kinds of methods to drive them away.

"The greatest case of a whale falling in love and standing right by its supposed mistress. which was a full-rigged ship, occurred on this The ship was named the Plymouth, and she sailed from San Francisco to Realejo, Central America. A few days out she almost ran over big sulphur-bottomed whale, the man at the wheel having to send the ship whirling up into the wind to avoid it; but the next day there was the whale again, close alongside. It evidently took the ship for a whale and did everything to attract its attention, and if the truth was told. emoralized the crew. It lay right alongside in calm weather, so that they could have tumped aboard it, and nothing had any effect. It fol lowed along, night and day. The crew fired bullets at it, tossed red hot roals on to its back and filled the water with ashes, they even pelted him with bottles and billets of wood, all of which he apparently took as love taps from his lady love; in any event, he paid no attention to them and perhaps did not feel them, the bullets sinking into the blubber. For three weeks this whale followed the ship and only left her when she ran into shallow water As he finally sheered off his back was a mass of scars from scratches made by the keel and the various missiles that had been fired at him. The bottom of the vessel showed signs of the experience, and the copper scratched by being rubbed by the big barnacles on the back of the whale."

"How big do these whales grow" "Why," replied the captain, "these sulphur bottomed whales in this channel range up to eighty or more feet. I believe the largest ever caught or measured was ninety-five feet. In such an animal the jaw bone alone is about twenty feet long. If the whale wore a belt around its walst it would have to be nearly forty feet in length. The baleen or whalebone from its mouth alone weighs 800 pounds, but this is nothing to the sperm whale. It is the whalebone whale that gets fooled by ships. The sperm whale may deceived and take the ship for a rival. This was the case of a ship in the South Pacific some years ago; she ran into a whale and injured it, whereupon the animal swam off a hundred yards

or so, then turned and came for the ship like a # UNCLE SAM'S INDIAN SCHOOLS, battering ram, striking her head on and smashing her in like an eggahell, leaving the men adrift a thousand miles from land. This ship went lown in ten minutes from the time she was struck.

The ship Ann Alexander was sunk off the coast of Peru in the same way.

"It's a curious sight to see a bull whale making

love, they go through a thousand antics to attract the attention of the cow. They leap into the air sometimes as light as a sardine and roll over and They're regular Mormons though. Each buil has a regular harem, all he can get to follow him, and it's a great sight to see a herd led by a big whale. If it's a sperm whale they will stand right on their tails and stick their heads out of the water to see if any danger is near. You might think that such a big animal wouldn't show much care for its young, but that's where you'd be mis taken. The mothers are just as affectionate in their way as a dog, and will fight for their young They generally have one, sometimes two at and they're big infants I tell you. Before they are born they are eighteen or ninete long, and the day they are born they are big and strong enough to make a hard fight. Most peo ple confuse whales with fish, but a whale is as much a cow as a real cow. I've often seen then in the Gulf of California, where the California gray whale goes in about Christmas time. There the young are born in the shallow water, the bulls waiting for them outside, and in early spring they all go up the coast slowly, so as to not tir out the infants. When they get hungry, the mother lies on the surface and the young nurs until they are satisfied. When the baby whale is tired she holds it in her long flippers, and when it is sick, wounded or attacked, she gets under i and holds it up.

"I was on a sailing trip once up north, where saw a lot of killers after a young whale; they were making all kinds of play for it; but the mother got under it and raised it to the surface and then ald about her with her tail, all the time trying to keep it out of reach. They will fight for their young harder than nine-tenths of the land animals that are generally supposed to have a good deal more sense. The courtship of the whale is often the ruin of the family, as it is not the quiet affair that courtships generally are. They have one trick alone that attracts the attention of every thing within five miles: this is a kind of love pe the male gives the female when he goes acous ing. He can't very well chuck her under the chin sometimes thirteen feet long you can hear this

ove pat like a clap of thunder or the discharge of a gun a mile away and can distinguish it fiv

"You must have been a great observer of ne ture," remarked the woman tourist, looking u

from the glass window. "Yes, marm," replied the skipper, turning the boat out of the kelp bed where she had swung "I was a whaler for twenty years, and it's a big drop for a man to come down from whaling looking at barnacles and seaweed through

"What did you do it for then" asked the tourist "Rheumatiz," was the brief reply.

### A DEVIL-INFESTED EDEN.

trange Experiences of Europeans with the Spooks of Abresinia.

From the London Times. Captain Welby, who has recently returned from an expedition through Abyssinia, tells the following extraordinary story of the baunted and of Walamo:

"One of the most weird and remarkable scenlever witnessed was in Walamo, some fortnight's ourney south of Adis Abeba. The place ha an evil reputation, and I had frequently heard that any person venturing to enter the coun try became the special prey of demons-in fac became possessed by demona. Of course, I pooh-poohed the idea, but nevertheless it made me more determined than ever to go there. My Abyssinians did not even demur when I told them of my resolve, but the fact really was that they did not think I should be permitted to enter the devil-infested zone. On reaching the mys terious place I found it to be one of great beauty It was a fertile country, with luxuriant vegetable growth, intersected with streams. It was, more-over, very hilly and well timbered. The inhabitants I found to be most friendly, although they told me they had never seen a white man before So far all had gone well, and I was more certain than ever that the evil reputation of the place was only based on superstitious nonsense. do not say that subsequent experience left any very clear idea in my mind, and I can in no way explain the marvellous phenomen which I witnessed. I only state the facts. "The first sign of anything wrong was when

one of my Somali escort rushed into camp shouting 'Walamo,' 'Walamo.' He was frightfully excited he shook violently and kicked like a madman. and in the interval between his shricks he told me that he was possessed by a devil. The whole of that night he was neither more nor less than a maniac, but the next day he was per fectly well. I had been previously told that once a man had become 'Walamo' or devil-possess he was always liable to a second attack, and as a simple measure of precaution the man's rifle was taken from him. While on the march he had another access of this curious madness in the course of which he drew a knife and rush. ing about threatened to kill everybody. It took several men to hold him down. It is supposed to be especially dangerous to eat food in the pres ence of the 'Walamo' people, and on one occ sion one of my Sudaneses saw a Walamo gazing intently upon him while he was having his meal. Nothing untoward occurred at the time, but two days later this man became a raving lunation "The latest victim, who was my headman, had

always been a peaceable orderly fellow, but he professed to know before the outbreak that he had become possessed. Certain it is that he, like the Somali, kicked and yelled and exhibited similar symptoms to the other unfor tunate. Without intermission he shouted 'We lamo' at the top of his voice and in his madness injured three men. Eventually he had to b tied up, but the next day he was perfectly well.

"Thinking I could perhaps do something explain these extraordinary occurrences I resolved to eat solemnly a meal in the presence of the Walamo myself. When all was prepared I had something like a hundred of these people watching me. In due time the meal was over. and I thought no more about it. Here I should state that I had not had a day's illness during the journey and was in the best of health at the time. The next day, however, I felt thoroughly ill. Needless to say I did not let any of my people know that anything was wrong nor can I attempt to explain the cause. I was quite unable to find a cause for this mysterious bus ness. I merely confine myself to a bare state ment of the facts. It was an anxious time for me, as I did not know whether at any moment the whole camp might not become 'Walamo.

## MINER GRANTE'S LUCK

Scraped Up \$20,000 Worth of Gold from From the Chicago Tribune.

DEADWOOD, S.D., Sept. 17.-The Grantz strike of gold ore in the North Lead mining district, three miles southwest of this city, is the absorbing topic in the Black Hills. A week ago Otto Grantz, an old German miner, who has worked in this particular place for a number of years, found a remarkably rich vein of gold

of years, found a remarkably rich vein of gold ore while looking for wolframite, and already \$20,000 has been taken out, and it is estimated that as much more is in sight.

Nothing like it has ever been found in the Black Hills before. The ore body follows the grass roots along, and for the last few days the novel sight of mining gold ore with teams and scrapers has been seen at the mine. The surface is being stripped to a depth of a foot or more, which reveals the ore body, with its thousands of dollars' worth of free gold.

Mr. Grantz, the owner, resides in his cabin at the mine, and his wife lives in Deadwood. As fast as the ore is mined it is hauled down to Deadwood and carefully stored away in sacks in a spare room, which is guarded by Mrs. Grantz. The ore is so rich that Mr. Grantz will not let it go to the stamp mill for treatment, but he intends to crush it and past to the intends to crush it and past it out himself this winter. The pulp will then be sent to the reduction works.

All Lawrence county is excited over the find. Mine owners and prospectors are putting in low boars locking over their ground for alm in the mine of their grants of their grants. Mine owners and prospe Mine owners and prospectors are putting in long hours looking over their ground for simi-lar veins of quartitie ore. Grants has been lar veins of quartrite ore. Grants has been offered a fortune for the mine, but he has thus far refused all offers.

Where Some of His Red Children Are Educated-Increasing Value of the School. CARLISLE, Sept. 22.—All during the summe months Major Pratt, the general superintend-ent of the Government school for Indians at Carliste, with other agents, has travelled among the tribes scattered through the Western States. and gathered up the available pupils to swell th list of the already big school at Carlisle, Pa., supported by the country for this purpose alone. Few people appreciate the size and the importance of this institution, which is being enlarged each year to answer the call upon it. Its power lies in the fact that it is bringing to terms tribes that have hitherto required soldiers and guns to make them understand we wish to be friendly Each pupil that leaves to return to his native

peace and good will. The undertaking, when in embryo, seemed of such gigantic proportions that little hope was entertained that the results would be favorable; but, contrary to expectation, the dream has turned into a reality that is so perfectly managed, that more has been accomplished than at first was

surroundings is, fortunately, an emissary of

About twenty years ago, the old cavalry be racks, that were partially burnt by Fitz Hugh Lee during the Civil War, were converted from their former purposes to their present one. They were first built in 1755 as outposts against Indian attacks; they are now used to harbo Indians and protect them against themselves. At the entrance gate to the campus there still stands the old Guard House, built by the Hessians that were captured by Washington.

The rest of the buildings are of later date. In all they number nearly twenty-four, the largest being the schoolhouse, in which is the chapel, the assembly room, and fourteen large, unusually well ventilated classrooms. The administra building lies not far distant, near which is the building reserved for the teachers' quarters; then comes the dining hall (seating capacity for 1,000) the store and kitchen departments; the electrical and steam heating departments; the boys sleeping quarters; the girls sleeping quarters; the hospital quarters; the gymnasium, and the workshops, where manual labor of all linds is taught. This list is long, because the entire work eeded for keeping up this establishment is given by the pupils under the management of teachers.

The rule that each pupil shall go to school fou hours a day, and work four hours a day at a trade is a good one, as then not only the necessary three R's of education are accomplished, but each scholar is fitted for some sphere in life. All the cooking and baking is done by the pupi a all the shoes worn are made and mended by the pupils: all the tinware used is manufactured by the pupils, who manage also a smithy, a wagon shop, a tailor establishment and harness mak ing department.

There is a well-known story, the pride of each teacher, that has gone the rounds regarding one of the pupils, who left four years ago and has since Christianized and brought to peaceable terms a whole tribe through the efficacious medium of a sewing machine and cooking stove, which were given her as equipments in leaving school Some pupils, however, do not return to their na tive haunts, as they become teachers or profes sional nurses
The term of the school year ends in February

in order that during the spring, summer and early autumn months the pupils may be placed in good homes on farms, where they learn dairy and all other outdoor work. They seem particularly fitted for this life and often remain in such places when they are released from school duty.

During the scholastic term all kinds of games

ausements and enterprises are undertaken Conedogwinet Creek affords skating; at other times football and baseball are the most loved ports. They even have a newspaper, the Indian Helper, that at a subscription of ten cents a year has 10,000 subscribers. The band and choir are the causes of great pride and are really very successful organizations; the former body of men are to go to the Paris Exposition.

Though headway has been made in music, the natural bent of the Indian is for drawing, modelng in clay and wood carving, in which branches they are pushed forward if any exceptional talent

It would seem that in the heterogeneous mass that presents itself before the faculty, great difficulty would arise in arranging all properly, but even this has been systematized. In the beginners' class, where the pupils can speak no English, may be found grown men and girls of most immature years. Of course, as is natural, the younger the pupil the more quick he is to learn, but all are aided in picking up the language by preventing those of the same tribe from seeing much of each other; different tribes cannot un erstand each other, therefore they commun cate in English. At times tribal difficulties arise among them, for the Apaches are hated by all the rest, but the intermingling in the classes of boys and girls together prevents this from happening often. As a whole they are a happy contented community. When the school was first formed the chief difficulty was found in making them conform to conventional dress and to conventional methods of arranging the hair; but now, as newcomers are in the minority in numbers, this atumbling block has gradually

Great pride is felt by the pupils in the success of the school, one building having been almost completely erected by contributions they have iven or collected; besides, they become greatly attached to their teachers and remember them by gifts on all festal occasions. As can be imagined, romance and marriage

are often the end of this coeducation -- the happy couple starting out in their new lives as mission aries of civilization to the wigwams from which they came.

## THE ORIGIN OF DIAMONDS.

Recent Discovery That May Throw Son Light on the Question. From the St. Louis Globe Democrat.

The origin of diamonds, which for so long as been a debated question, appears to be ex plained by a recent discovery near Kimberley. In both the Indian and the Brazilian diame fields the gem occurs like a pebble in certain grav elly strata, but has not been traced back to any rock that gives any indication of its genesis After the discovery of diamonds in the river sand in some South African rivers, a peculiar material of a brownish-buff color, which turned to a dark bluish tint was found. It became darker as the miners dug down. The diamonds lay in this material, together with several other me terials, such as garnets, iron ores, augite, olivine &c. Excavations, begus systematically, were eventually carried on on such a scale that near Kimberley they had reached a depth of mor than 1,400 feet. Here the rock is about as hard as ordinary limestone. The blue ground is found only in limited areas. The rocks around are of dark shales, banded with hard sandstone, in which sheets or dykes of basalt or some ma terial which was once in a molten condition are occasionally found. The blue ground fills a sort of shaft of colossal size in these other rocks, and is itself cut up by similar dykes. The opin on of geologists differs as to whether the gems are produced where they now lie or have been formed of some volcanic explosions. It is thought that the mystery has been at last cleared

About two years ago the manager of a diamond mine owned near Kimberley picked up a specimen in which smaller diamonds were apparently imbedded in the garnet. This led t an investigation of various bowlders, one of which was broken open and was found to contain diamonds. The rock is of the description known to mineralogists as "eclogite." It is apparently composed almost exclusively of red garnet rock and a pecular light green augite. The rock is coarsely crystalline, and in all probability was once like garnet in a molten condition, the dianond being one of its original constituents. Ex perts now tend to the belief that the "blue ground" which diamonds were found is not their true birthplace. The bowlders are often matermarked. and may have rested for ages in an ancient gravel at the very bottom of sedimentary rocks of the In course of time volcanio explosions shattered the rocky floor in which the diamonds were imbedded, of which the bowlders were samples, and dispersed it, togethe only with the overlying materials. It is believed that this is the true explanation of the forms tion of the diamond-bearing "blue ground."

# THOSE THREE NORTH STARS

SOME OF THE WONDERFUL RESULTS OF SPECTROSCOPIC UBSERVATION.

Lucid Explanation of the Use of the Spectroscope in Revealing the Presence of Invisible Heavenly Bodies and Determining Their Movements in the Sky.

From the Boston Evening Transcript. For many years scientists have known of the existence of a faint companion to the North star. So close and faint is this companion that owners of small telescopes have often used it o test the power of their eyes and instruments. News has lately come from the Lick Observatory at Mt. Hamilton, California, of the discorery that Polaris consists of three stars, two of which revolve around a common centre of gravity in about four days. At the same time these two revolve around a third star in much the same way as the earth and moon revolve around the sun. In this case the test is se severe that no telescope can see the individual stars. We can only infer their existence by noticing a peculiar phenomenon in the specrum of Polaris.

The stars, and, in fact, all luminous bodiers; ed emit a series of waves which are transmitted by the ether to us. Those waves that fall upon the retina of our eyes produce a sensation that we call light. In the case of many millions of stars the effect of these waves upon our eyes is inappreciable. Without the aid of some instrument such stars are invisible. The lens of a telescope condenses a large area of waves into

telescope condenses a large area of waves into a small compass, and this increases the effect upon the eyes of the observers. Consequently telescopes with large lenses can gather in so much light as to make exceedingly faint stars visible to the observer.

But light has another characteristic besides intensity—that is, color. When a certain number of waves enter the sye each second we call the resulting sensation red. When a larger number enter each second we call the sens tion violet, &c. If the light gathered by some large telescope passes through a prism, or, better, severa; prisms, the different colors are arranged in the order of their wave length. Such as arrangement of colors has been named the spectrum.

several prisms, the different colors are arranged in the order of their wave length. Such as arrangement of colors has been named the spectrum.

The spectrum of the sun and of most of the stars is crossed by a number of fine, dark lines. These lines are really gaps caused by the absence of rays of light of vertain wave lengths. The light before it can reach our telescope, has to pass through an extensive solar atmosphere which absorbe certain parts. The gaps in the spectrum caused by atmospheric absorption of the sun and stars are called lines.

When a luminous body is at rest, the waves of light are emitted in all directions slike. But when it is moving rapidly the waves in front are crowded, while those in the rear are correspondingly lengthened. Of course, at the sidus the waves continue to be emitted at their normal wave length. The same phenomenen is exhibited in sound. If an express train whistless as it passess, the pitch of the whistle is perceptibly lower when the train is receding than when it is approaching. Therefore, when the star is approaching the earth with a sufficiently large velocity, all the lines are displaced at trife toward the violet, that being the color with the shortest wave length. Conversely, when the star is receding from the earth the lines are displaced toward the red end of the spectrum. This displacement is so exceedingly slight that measurements of its amount have had little value until recently. The first successful investigation on the motion in the line of sight was upon the rotation of the sun by Vogel in 1871. Since them the spectra have been photographed and measured. In this way displacements corresponding to a velocity considerably less than a mile per second can be detected.

If two stars are so close together that they appear in the telescope as a single object, the spectra will be superimposed. So long as these two stars move away from us, or toward us at the same rate, the lines in this compound apectrum will continue to maintain the same relative positions. But if

only one of the components of a binary star is bright enough to be seen. As this star revolves around the centre of gravity between it and its dark companion it is sometimes approaching and sometimes receding from the earth. The lines of its spectrum are therefore displaced first toward the violet and then toward the red and of the spectrum. Hence when a star is found whose motion in the line of sight is variable, it is justifiable to conclude that there is close to it a fainter companion. The period of revolution of such bodies about their centre of gravity is, of course, obtained directly from the observations.

of gravity is, of course, obtained directly from the observations.

In 1887 a photograph taken at the Harvard College Observatory of the spectrum of Zeta Urse Majoris the middle star in the handle of the Dipper was found to contain several double lines. An examination of the photographs showed that the lines are sometimes double and sometimes single. Evidently we have here a double star whose components are so close together that no telescope can show them as double stars. They are revolving around a common centre of gravity in such a plane that when one is approaching the other is receding from the earth. Twice during every revolution they are nearly in a line with the earth. They are then neither approaching nor receding, the lines of their spectra are in juxtaposition and appear single.

Beta Persei, named Algol, furnishes an expense of a binary star where only one of the

earth. They are then neither approaching nor receding, the lines of their spectra are in juxtaposition and appear single.

Beta Fersel, named Algol, furnishes an examble of a binary star where only one of the components is visible. Vogel, at Potsdam in 1888, found from the displacement of the lines in the spectrum that Algol is moving in a small orbit at the rate of twenty-six miles per second. To account for this it is necessary to assume that there is a dark body, and that Algol and its companion are moving around a common centre of gravity. In this instance the existence of the dark companion is still further demonstrated by the variation in Algol's light. Goodricke in 1782 discovered that Algol was a variable star. It is usually constant in brightness, but at times it will decrease in light for a few hours and then in a few hours more regain its normal brightness. These minima in light occur with great regularity, the period being a little less than seventy hours. Such a phenomenon naturally suggests a partial sclipse caused by some dark body periodically passing between us and the star.

By means of the enormous light-gathering power of the Lick telescope (thirty-six lacked aperture) Prof. Keeler has been able to measure the velocity in the line of sight of the Great Orion Nebula. He finds that it is receding from the earth at the rate of about eleven miles per second. While at the Allegheny Observatory Prof. Keeler used this same spectrosoopte method to prove that Satura's rings are neither solid nor liquid. They consist of small bodies that revolve around Satura.

Spectroscopic determinations of motion in the line of sight; sone of the most promising fields of investigation in astronomy. Many roblems have been solved that for conturies have seemed hopelessly beyond our reach.

TWO MEN NAMED CAIN.

Also Ananias, Sapphira, Potiphar and Delilah-Narrow Escape from Judas. READING. Sept. 28 .- A clergyman who has

large country congregation in southern Berks reports that Cain Kemmerer, aged 85, is now a mental wreck. Kemmerer not only was named 'ain, but he gave his only son that name also So far as is known they are the only two people in east Pennsylvania who are named after the slayer of his brother Abel. The preacher was saked whether he knew of any other odd names of people in the same region. He replied:

"There are two other odd names that always strike me. One is Ananias and the other Sa phira, but the bearers are not man and wife. We have several Noahs, one Methuselah and one Potiphar, Potiphar Piligree, I think. There are two Zebedees, one Delilah, and a number of other odd Biblical names. Not long ago, a couple brought a boy to me to be christened and they had selected the name of Judas. I kindly objected to this and told them the history of the betrayer of our Lord. Evidently they did not know this. They were charcoal burners from the backwoods. I told them not to give their boy such a name to carry with him for all the remainder of his days. They finally agreed to call him Joseph, after his father, and I was glad to go on with the ceremony

"The people christened Cain were simply the

victims of fancy. Their parents took a liking to the name, and without any regard to the his torical connection fastened the name to their offspring. The same is true of the other names. Cain Kemmerer named his son Cain deliberate-He said it was short, sharp and to the point, and sounded well with Kemmerer, so he used it on his boy. The old man is German, and being a rough mountaineer he stopped me on the high way a few Sundays before the annual communion and got my promise not to akip or pass him by if he came to the communion table. I required the old man publicly to make his professions and confessions of his religious belief, and in addition the old man knelt and reprated sixteen verses of German hymns with the statement of the fact that his name Cain did not indicate any disrespect for the Bible. People," contin ued the preacher, "are so used to those names that they don't give them a thought. It is only the stranger that is struck with the oddity."